OIPE
JAN 0 8 2004
PATENT & TRADEMARK OFFICE
JC56

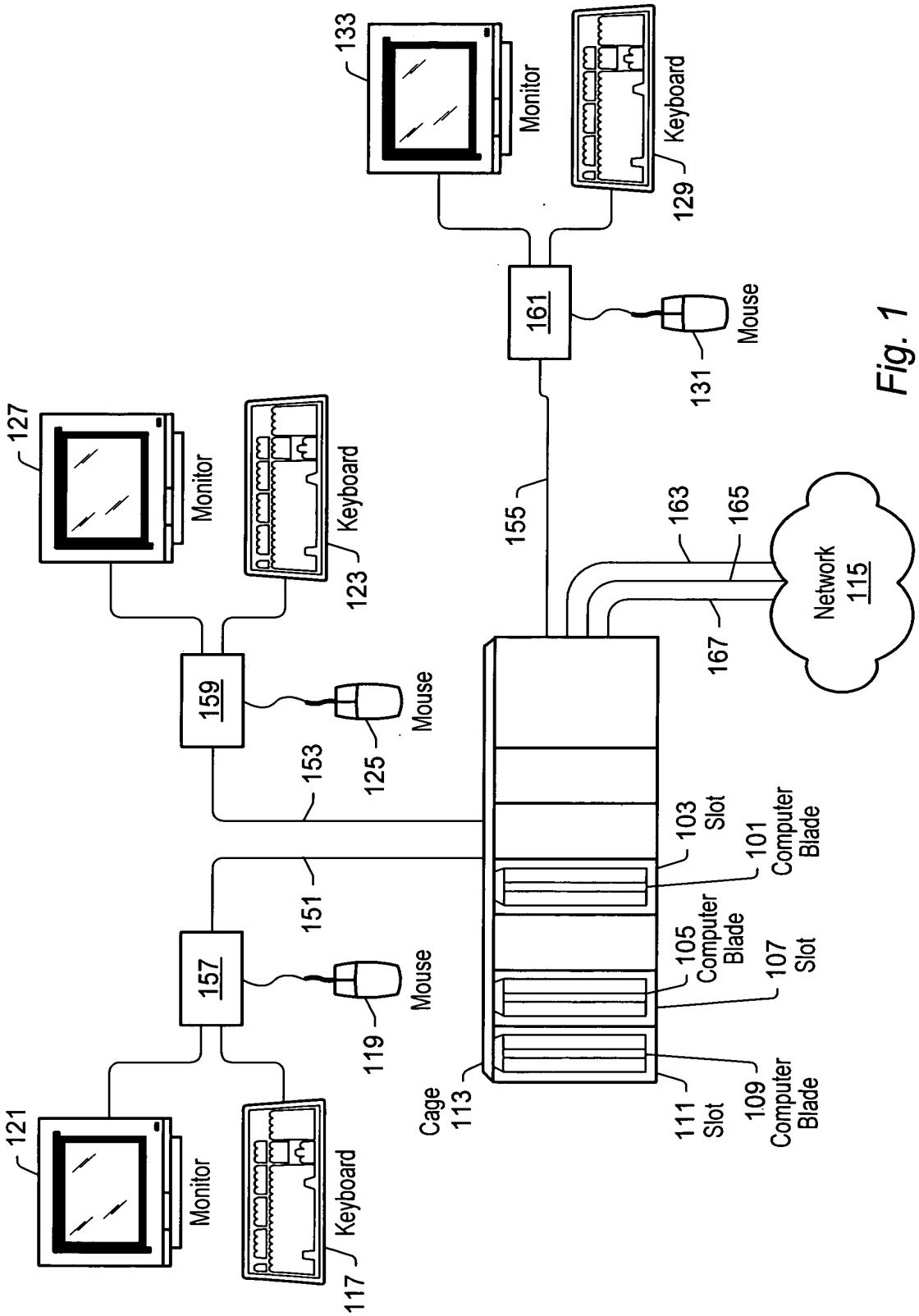


Fig. 1

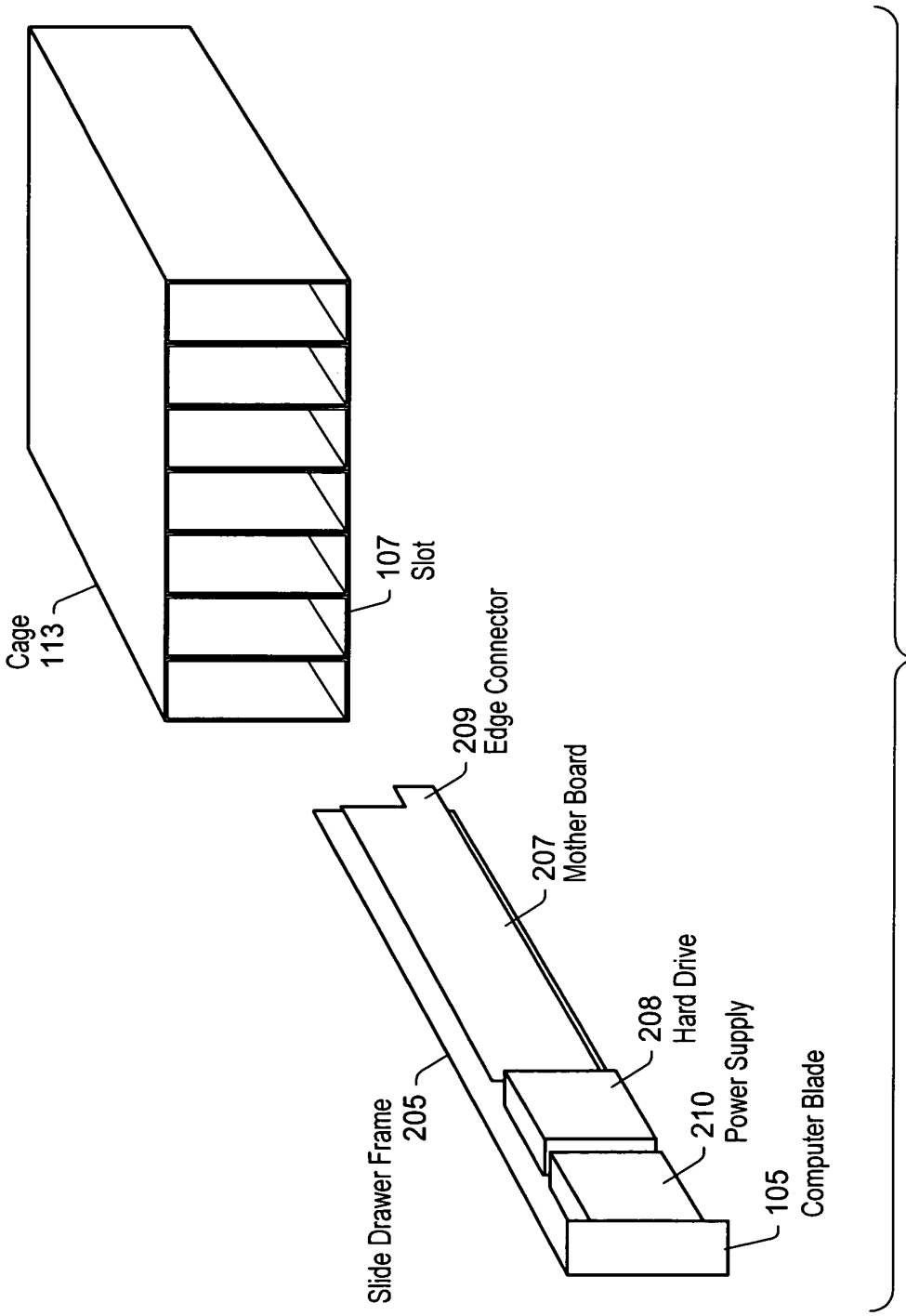

Cage
113
107
Slot
209
Edge Connector
207
Mother Board
208
Hard Drive
210
Power Supply
105
Computer Blade
Slide Drawer Frame
205

Fig. 2

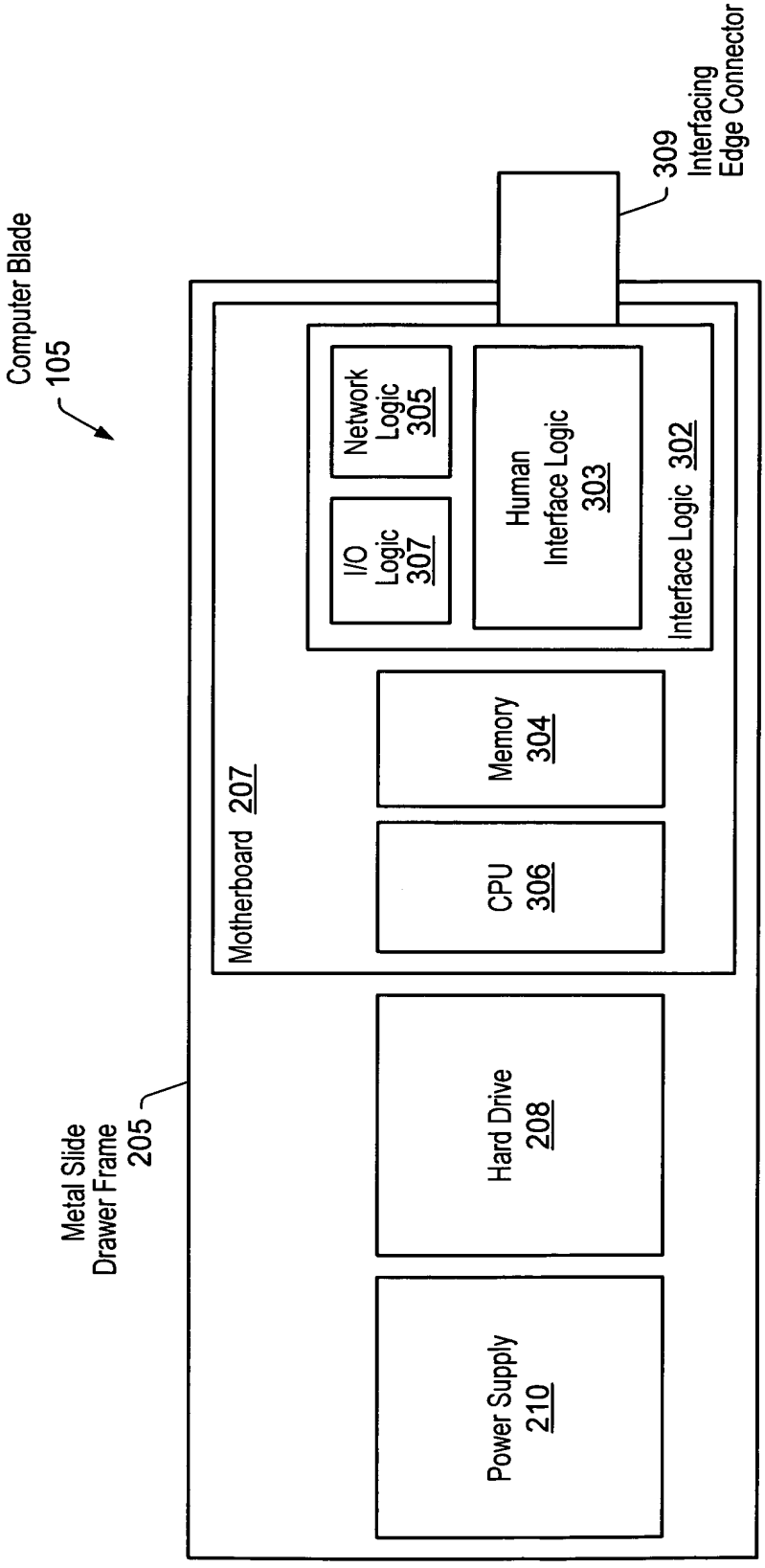

Computer Blade
105
309
Interfacing
Edge Connector
Metal Slide
Drawer Frame
205
Motherboard 207
Power Supply
210
Hard Drive
208
CPU
306
Memory
304
Interface Logic 302
I/O
Logic
307
Network
Logic
305
Human
Interface Logic
303

Fig. 3

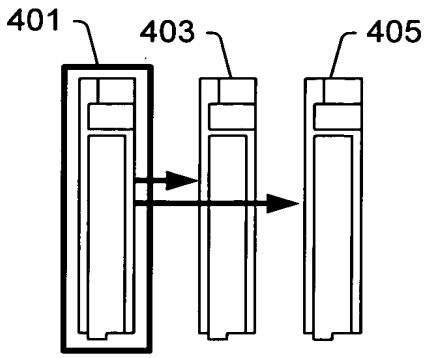


Fig. 4A

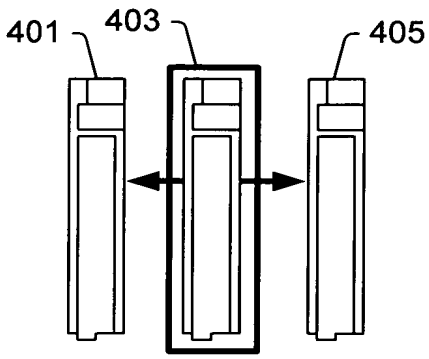


Fig. 4B

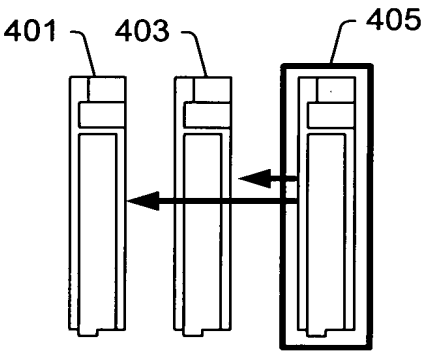


Fig. 4C

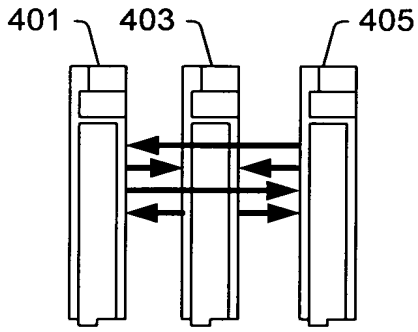


Fig. 4D

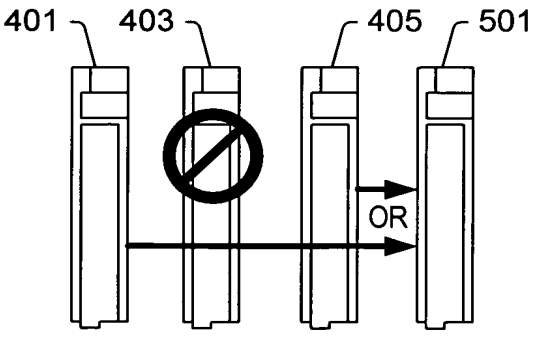


Fig. 5

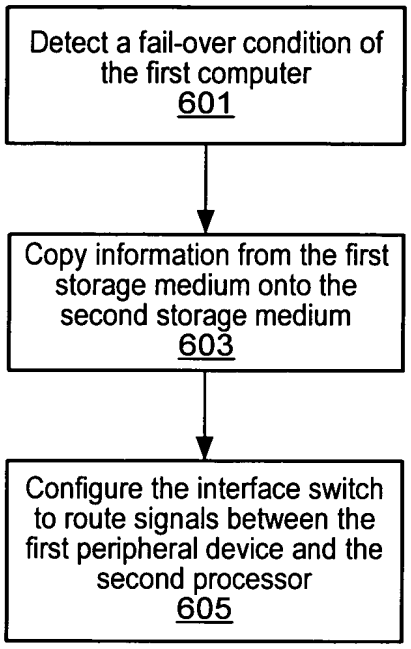


Fig. 6

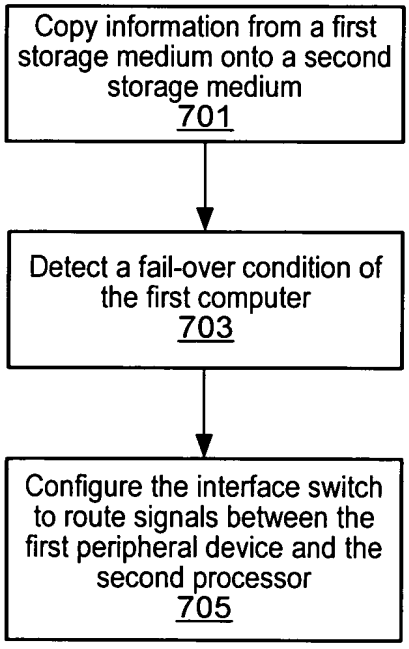


Fig. 7

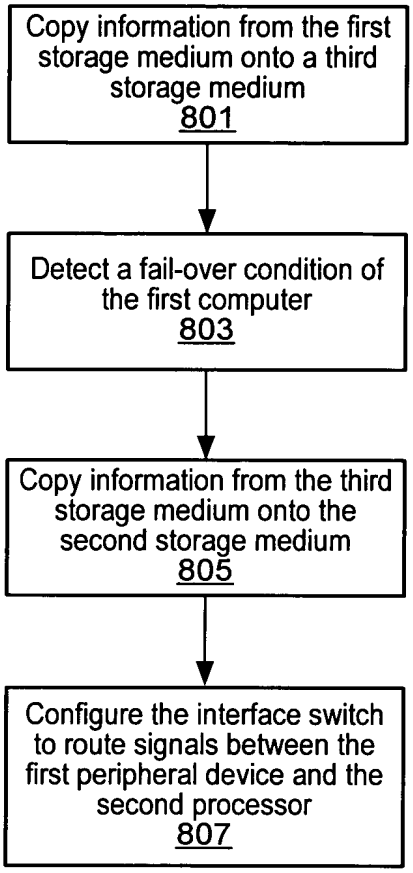


Fig. 8

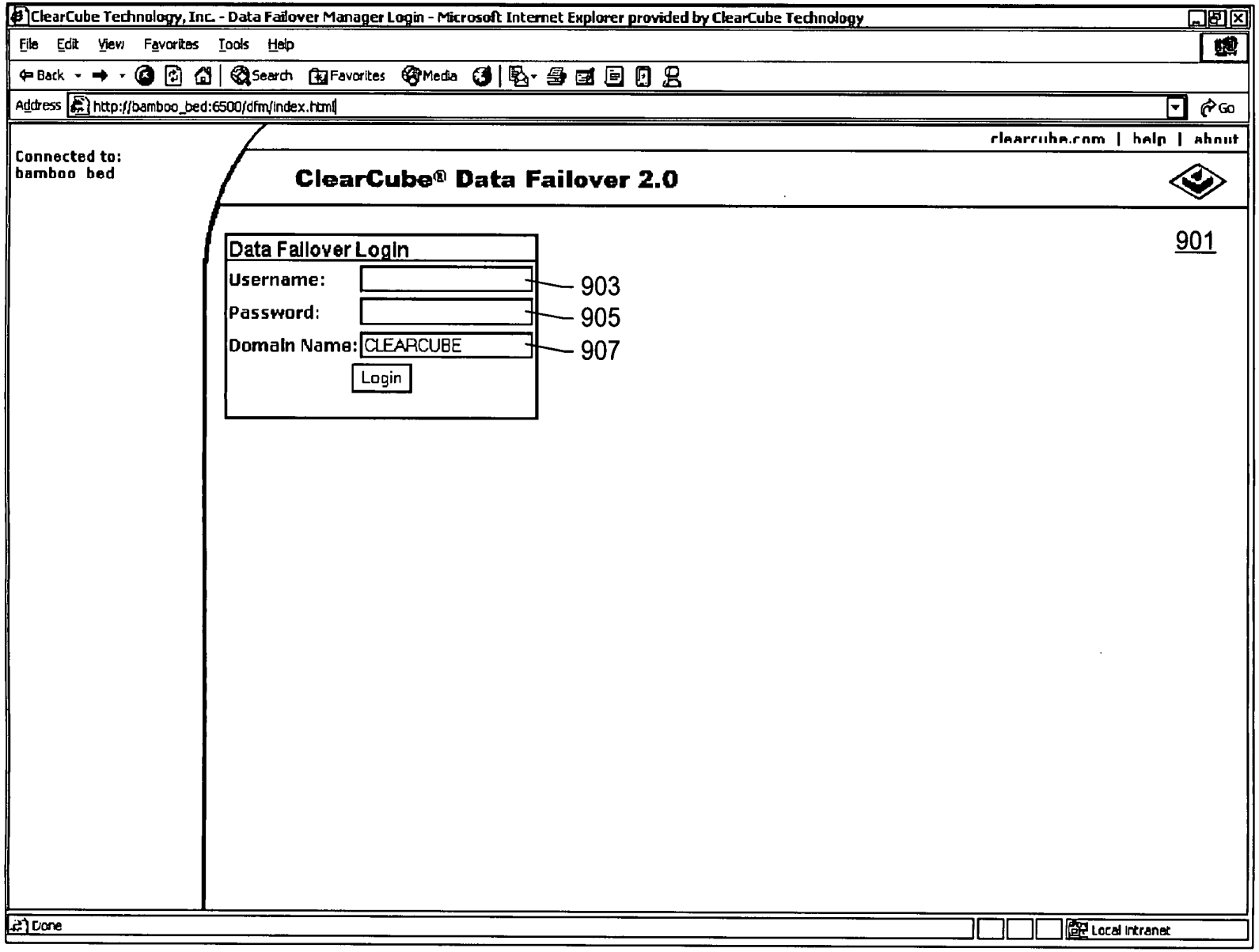

ClearCube Technology, Inc. - Data Failover Manager Login - Microsoft Internet Explorer provided by ClearCube Technology
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://bamboo_bed:6500/dfm/index.html
Go
clearcube.com | help | about
Connected to:
bamboo_bed
ClearCube® Data Failover 2.0
901
Data Failover Login
Username:
Password:
Domain Name: CLEARCUBE
Login
903
905
907
Done
Local Intranet

Fig. 9

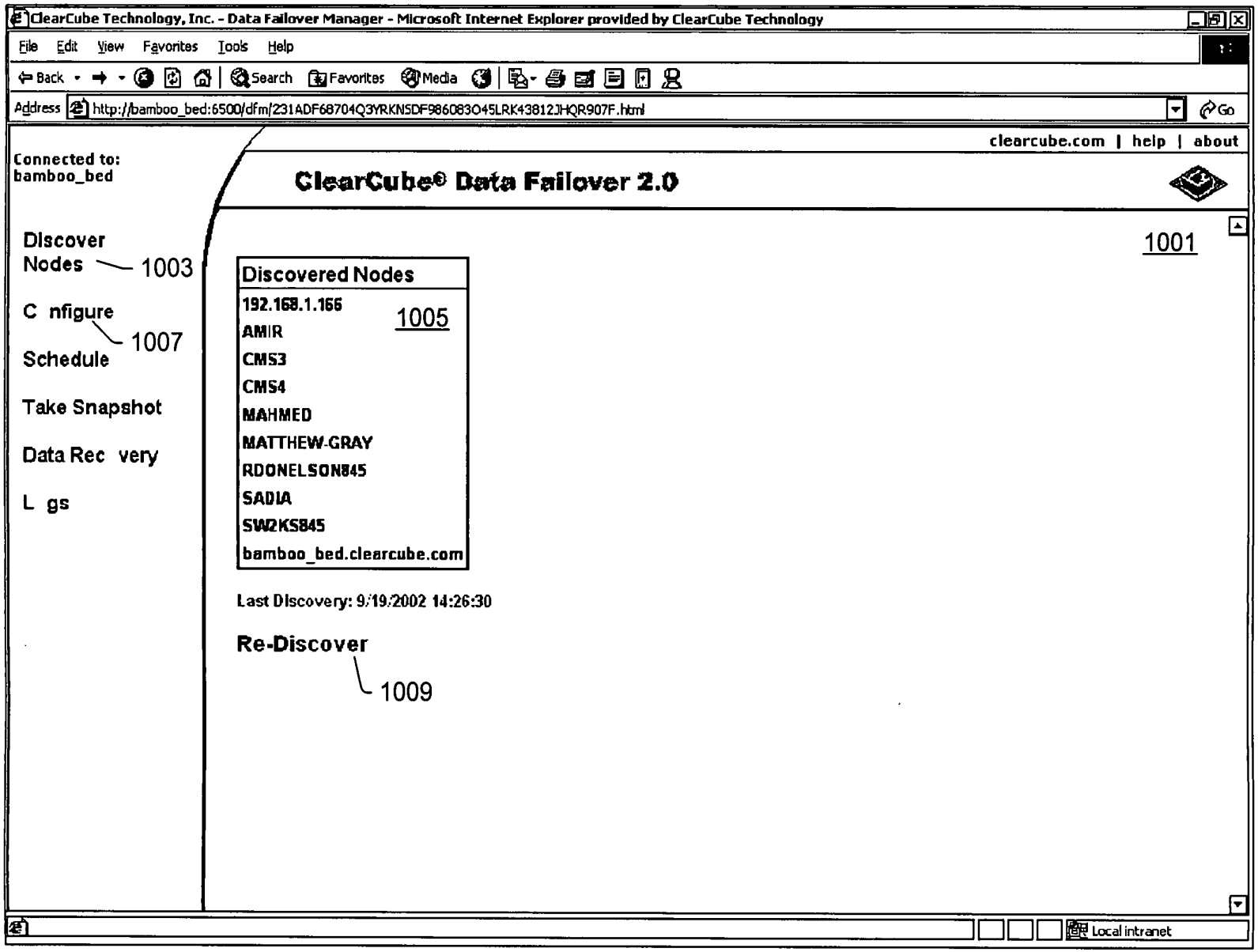
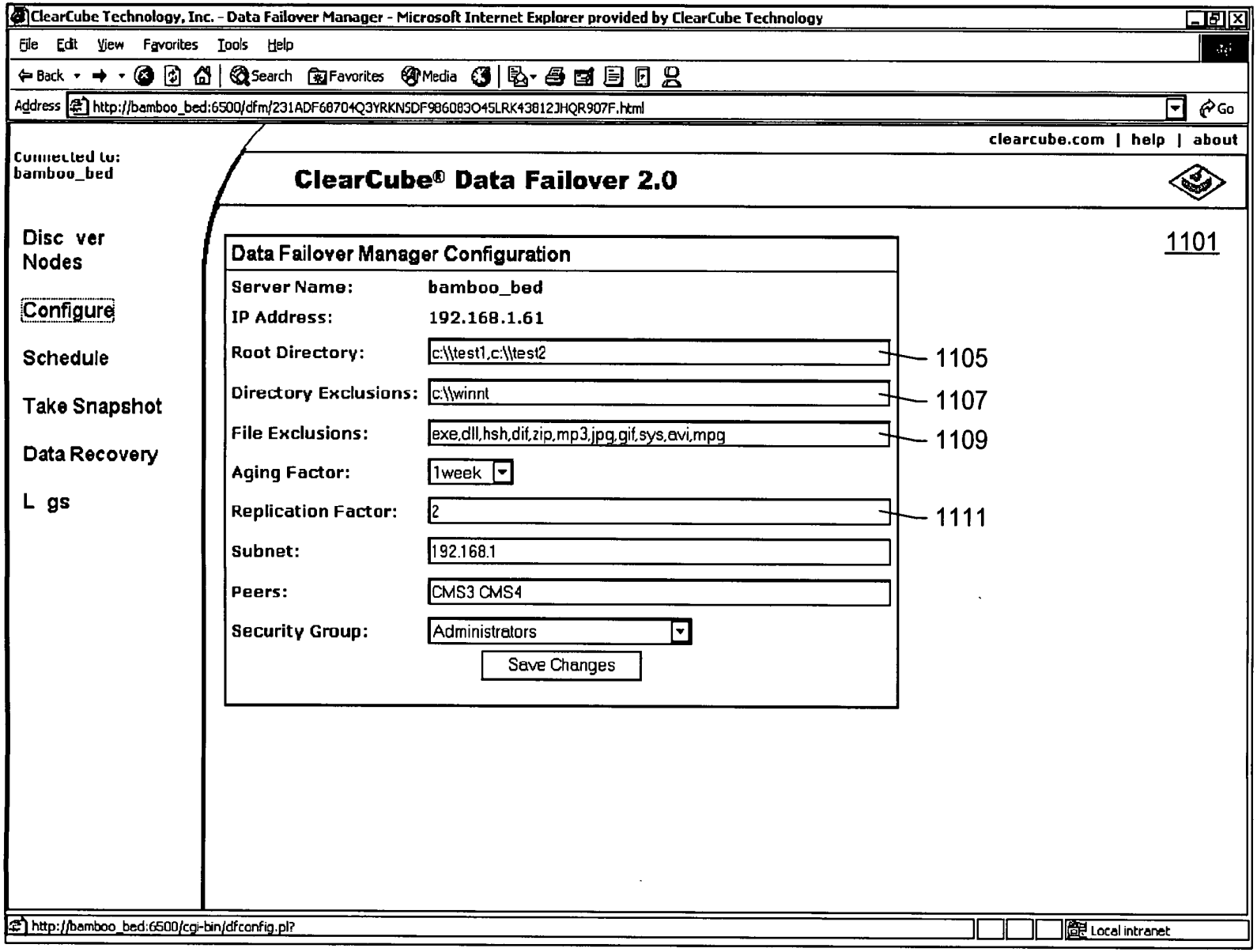

ClearCube Technology, Inc. - Data Failover Manager - Microsoft Internet Explorer provided by ClearCube Technology
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://bamboo_bed:6500/dfm/231ADF68704Q3YRKNSDF986083O45LRK43812JHQR907F.html
Go
clearcube.com | help | about
Connected to:
bamboo_bed
ClearCube® Data Failover 2.0
1001
Discover Nodes
1003
C nfigure
1007
Schedule
Take Snapshot
Data Rec very
L gs
Discovered Nodes
1005
192.168.1.166
AMIR
CMS3
CMS4
MAHMED
MATTHEW-GRAY
RDONELSON845
SADIA
SW2KS845
bamboo_bed.clearcube.com
Last Discovery: 9/19/2002 14:26:30
Re-Discover
1009
Local intranet

Fig. 10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Address http://bamboo_bed:6500/dfm/231ADF68704Q3YRKNSDF986083O45LRK43812JHQR907F.html
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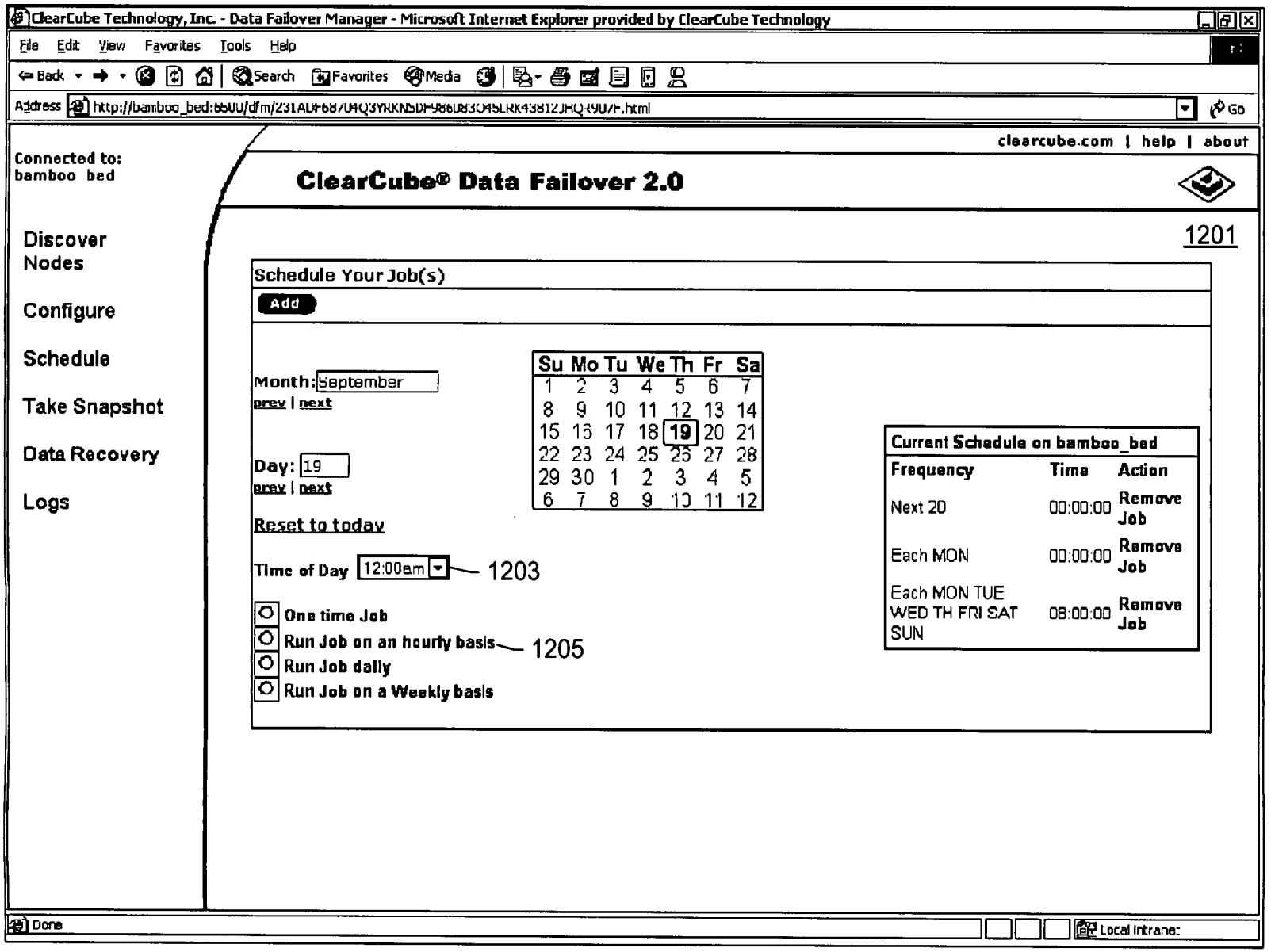
bamboo_bed
clearcube.com | help | about
ClearCube® Data Failover 2.0
Disc ver Nodes
Configure
Schedule
Take Snapshot
Data Recovery
L gs
1101
Data Failover Manager Configuration
Server Name: bamboo_bed
IP Address: 192.168.1.61
Root Directory: c:\\test1,c:\\test2
1105
Directory Exclusions: c:\\winnt
1107
File Exclusions: exe,dll,hsh,dif,zip,mp3,jpg,gif,sys,avi,mpg
1109
Aging Factor: 1week
Replication Factor: 2
1111
Subnet: 192.168.1
Peers: CMS3 CMS4
Security Group: Administrators
Save Changes
http://bamboo_bed:6500/cgi-bin/dfconfig.pl?
Local intranet

Fig. 11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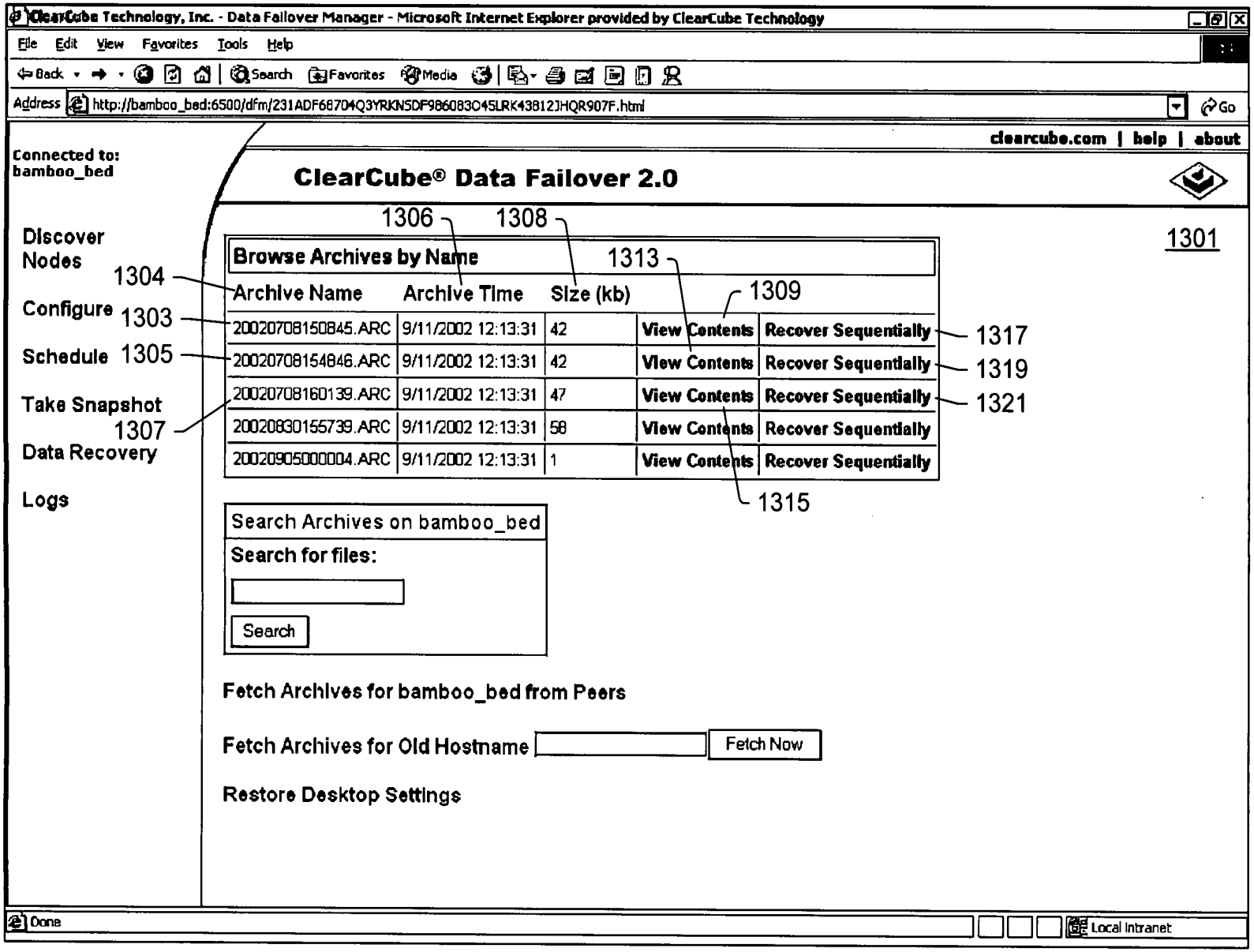
Address http://bamboo_bed:6500/dfm/Z31AUH68/UHQ3YRKNSDF986U83O45LRK43812JHQ49U/F.html
Go
clearcube.com | help | about
Connected to:
bamboo bed
ClearCube® Data Failover 2.0
Discover Nodes
Configure
Schedule
Take Snapshot
Data Recovery
Logs
1201
Schedule Your Job(s)
Add
Month: September
prev | next
Su Mo Tu We Th Fr Sa
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 1 2 3 4 5
6 7 8 9 10 11 12
Day: 19
prev | next
Reset to today
Time of Day 12:00am
1203
One time Job
Run Job on an hourly basis
1205
Run Job daily
Run Job on a Weekly basis
Current Schedule on bamboo_bed
Frequency Time Action
Next 20 00:00:00 Remove Job
Each MON 00:00:00 Remove Job
Each MON TUE WED TH FRI SAT SUN 08:00:00 Remove Job
Done
Local intranet

Fig. 12


ClearCube Technology, Inc. - Data Failover Manager - Microsoft Internet Explorer provided by ClearCube Technology
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Back Search Favorites Media
Address http://bamboo_bed:6500/dfm/231ADF68704Q3YRKN5DF986083C45LRK43812JHQR907F.html
Go
clearcube.com | help | about
Connected to: bamboo_bed
ClearCube® Data Failover 2.0
1301
Discover Nodes
Configure
Schedule
Take Snapshot
Data Recovery
Logs
1304
1303
1305
1307
1306
1308
1313
1309
1317
1319
1321
1315
Browse Archives by Name
Archive Name | Archive Time | Size (kb)
20020708150845.ARC | 9/11/2002 12:13:31 | 42 | View Contents | Recover Sequentially
20020708154846.ARC | 9/11/2002 12:13:31 | 42 | View Contents | Recover Sequentially
20020708160139.ARC | 9/11/2002 12:13:31 | 47 | View Contents | Recover Sequentially
20020830155739.ARC | 9/11/2002 12:13:31 | 58 | View Contents | Recover Sequentially
20020905000004.ARC | 9/11/2002 12:13:31 | 1 | View Contents | Recover Sequentially
Search Archives on bamboo_bed
Search for files:
Search
Fetch Archives for bamboo_bed from Peers
Fetch Archives for Old Hostname
Fetch Now
Restore Desktop Settings
Done
Local Intranet

Fig. 13

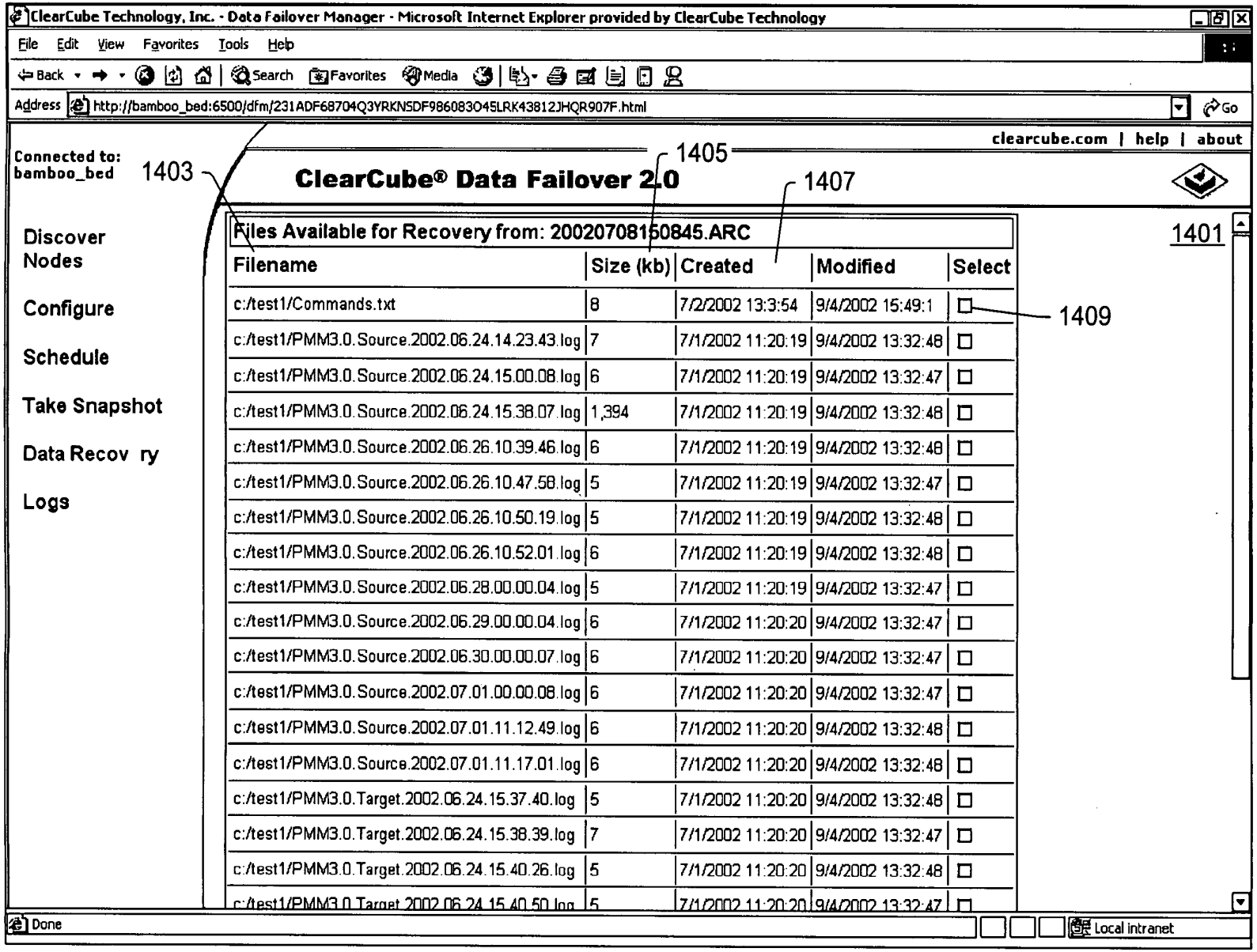
ClearCube Technology, Inc. - Data Failover Manager - Microsoft Internet Explorer provided by ClearCube Technology
File Edit View Favorites Tools Help
Back Search Favorites Media
Address http://bamboo_bed:6500/dfm/231ADF68704Q3YRKNSDF986083O45LRK43812JHQR907F.html
Go
clearcube.com | help | about
Connected to: bamboo_bed
1403
1405
1407
ClearCube® Data Failover 2.0
1401
Discover Nodes
Configure
Schedule
Take Snapshot
Data Recov ry
Logs
Files Available for Recovery from: 20020708150845.ARC
Filename | Size (kb) | Created | Modified | Select
c:/test1/Commands.txt | 8 | 7/2/2002 13:3:54 | 9/4/2002 15:49:1
1409
c:/test1/PMM3.0.Source.2002.06.24.14.23.43.log | 7 | 7/1/2002 11:20:19 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Source.2002.06.24.15.00.08.log | 6 | 7/1/2002 11:20:19 | 9/4/2002 13:32:47
c:/test1/PMM3.0.Source.2002.06.24.15.38.07.log | 1,394 | 7/1/2002 11:20:19 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Source.2002.06.26.10.39.46.log | 6 | 7/1/2002 11:20:19 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Source.2002.06.26.10.47.58.log | 5 | 7/1/2002 11:20:19 | 9/4/2002 13:32:47
c:/test1/PMM3.0.Source.2002.06.26.10.50.19.log | 5 | 7/1/2002 11:20:19 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Source.2002.06.26.10.52.01.log | 6 | 7/1/2002 11:20:19 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Source.2002.06.28.00.00.04.log | 5 | 7/1/2002 11:20:19 | 9/4/2002 13:32:47
c:/test1/PMM3.0.Source.2002.06.29.00.00.04.log | 6 | 7/1/2002 11:20:20 | 9/4/2002 13:32:47
c:/test1/PMM3.0.Source.2002.06.30.00.00.07.log | 6 | 7/1/2002 11:20:20 | 9/4/2002 13:32:47
c:/test1/PMM3.0.Source.2002.07.01.00.00.08.log | 6 | 7/1/2002 11:20:20 | 9/4/2002 13:32:47
c:/test1/PMM3.0.Source.2002.07.01.11.12.49.log | 6 | 7/1/2002 11:20:20 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Source.2002.07.01.11.17.01.log | 6 | 7/1/2002 11:20:20 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Target.2002.06.24.15.37.40.log | 5 | 7/1/2002 11:20:20 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Target.2002.06.24.15.38.39.log | 7 | 7/1/2002 11:20:20 | 9/4/2002 13:32:47
c:/test1/PMM3.0.Target.2002.06.24.15.40.26.log | 5 | 7/1/2002 11:20:20 | 9/4/2002 13:32:48
c:/test1/PMM3.0.Target.2002.06.24.15.40.50.log | 5 | 7/1/2002 11:20:20 | 9/4/2002 13:32:47
Done
Local intranet

Fig. 14

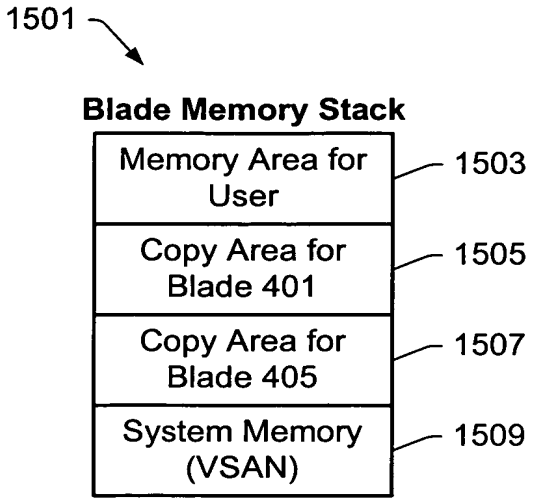

Fig. 15

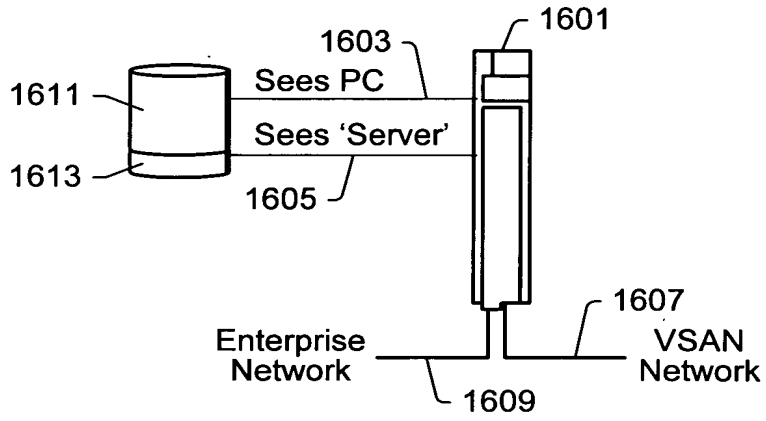

Fig. 16

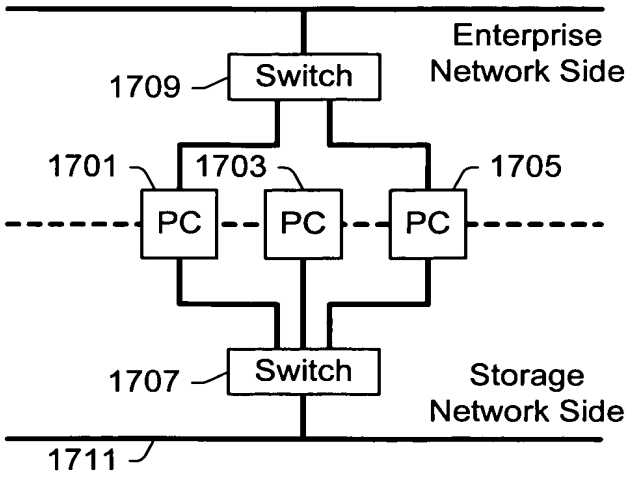

Fig. 17

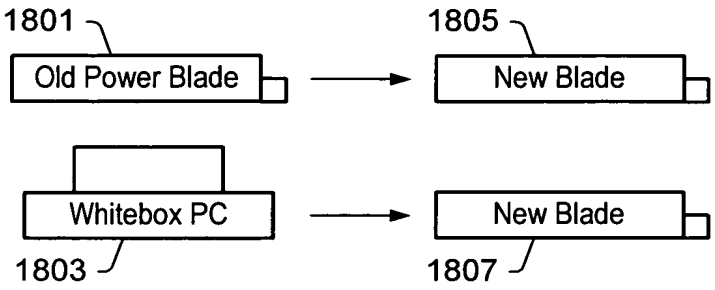

Fig. 18

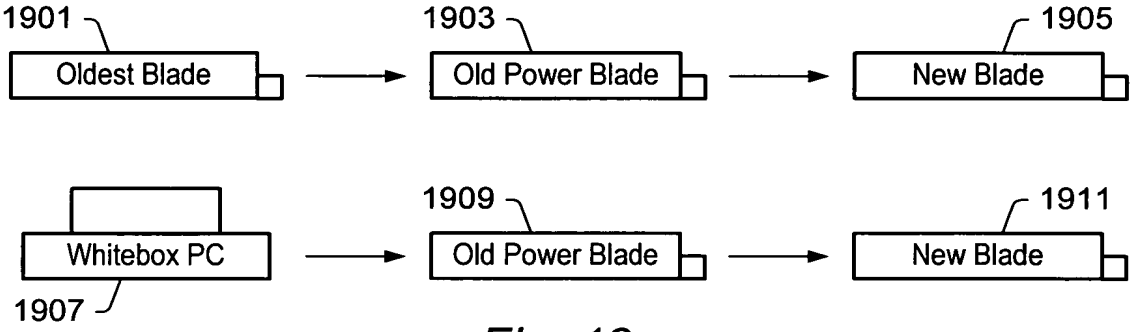

Fig. 19

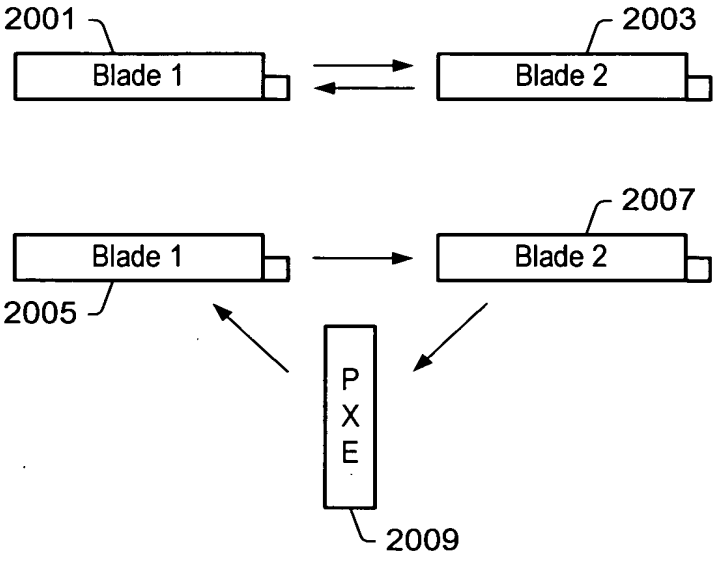

Fig. 20

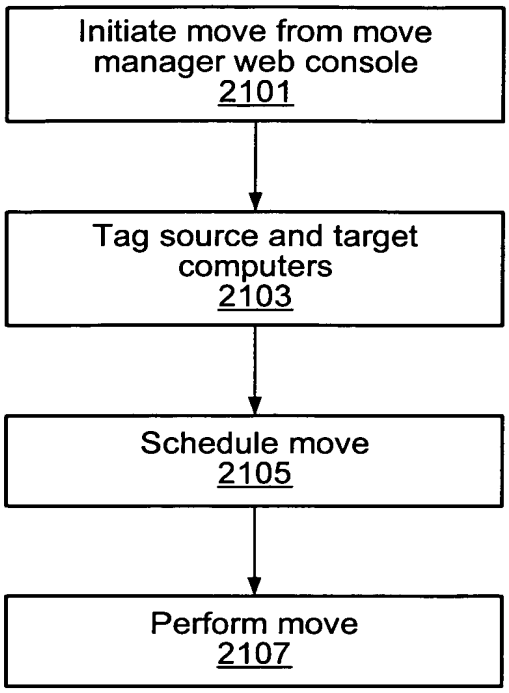
Initiate move from move manager web console 2101
Tag source and target computers 2103
Schedule move 2105
Perform move 2107

Fig. 21

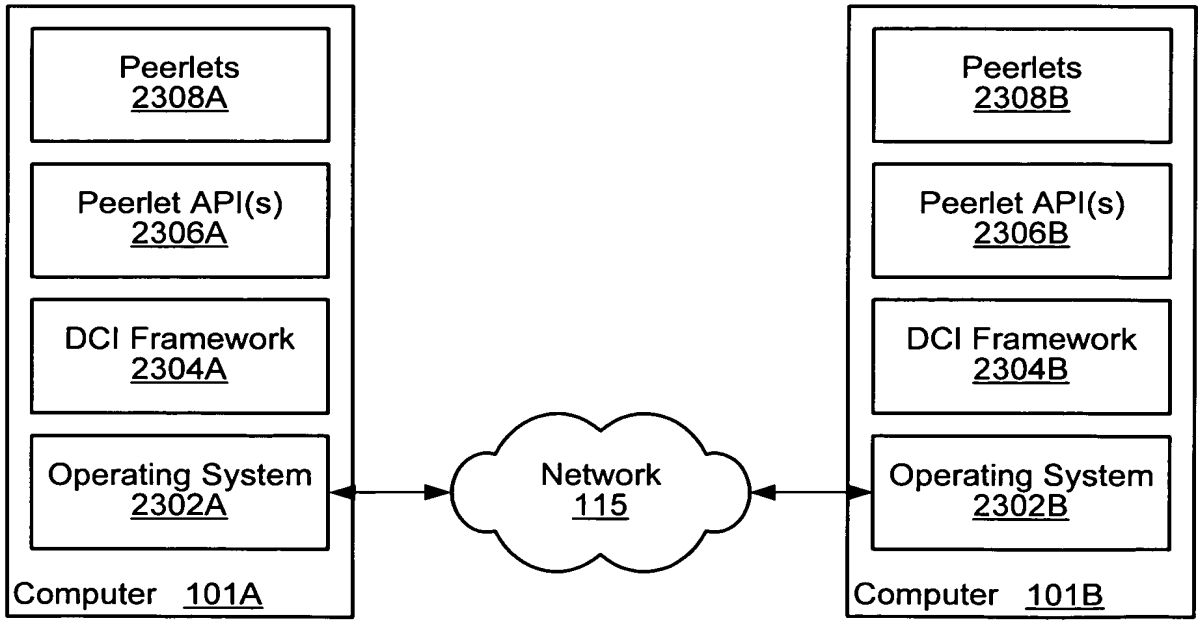
Peerlets 2308A
Peerlet API(s) 2306A
DCI Framework 2304A
Operating System 2302A
Computer 101A
Network 115
Peerlets 2308B
Peerlet API(s) 2306B
DCI Framework 2304B
Operating System 2302B
Computer 101B

Fig. 22

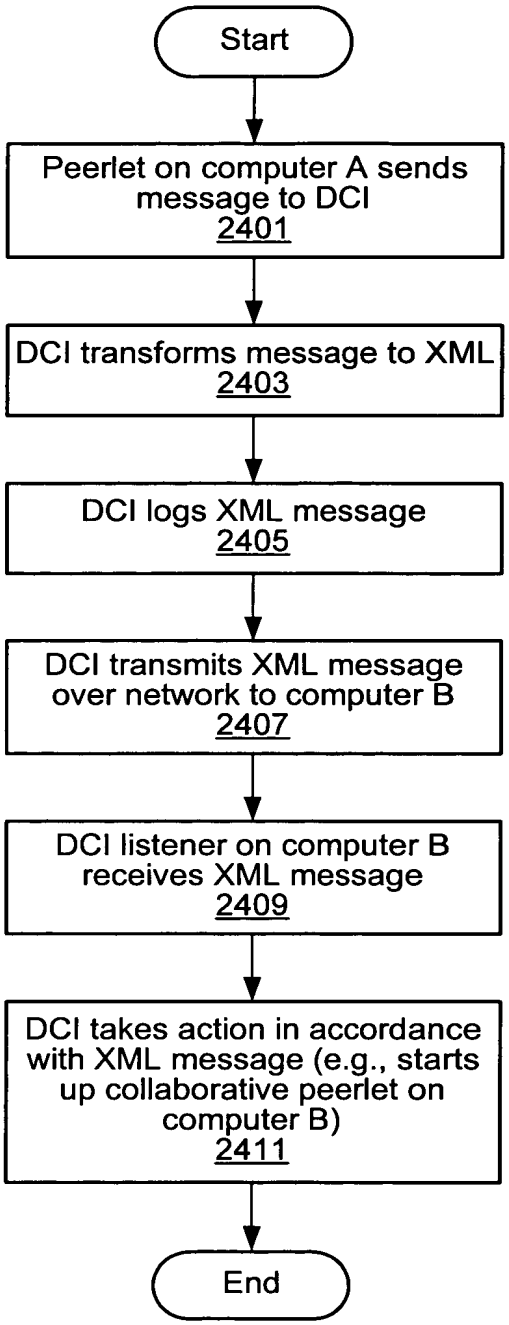
Start
Peerlet on computer A sends message to DCI
2401
DCI transforms message to XML
2403
DCI logs XML message
2405
DCI transmits XML message over network to computer B
2407
DCI listener on computer B receives XML message
2409
DCI takes action in accordance with XML message (e.g., starts up collaborative peerlet on computer B)
2411
End

Fig. 23

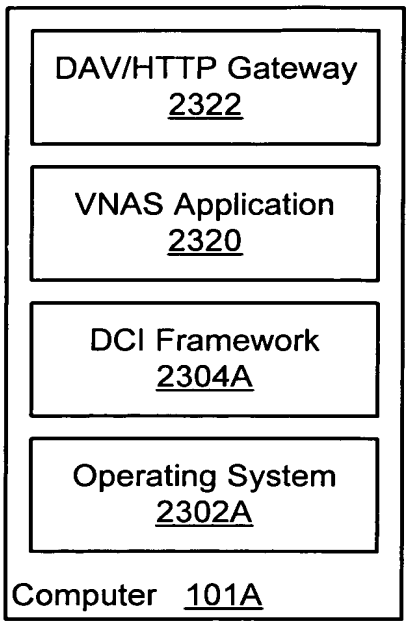
DAV/HTTP Gateway
2322
VNAS Application
2320
DCI Framework
2304A
Operating System
2302A
Computer 101A

Fig. 24

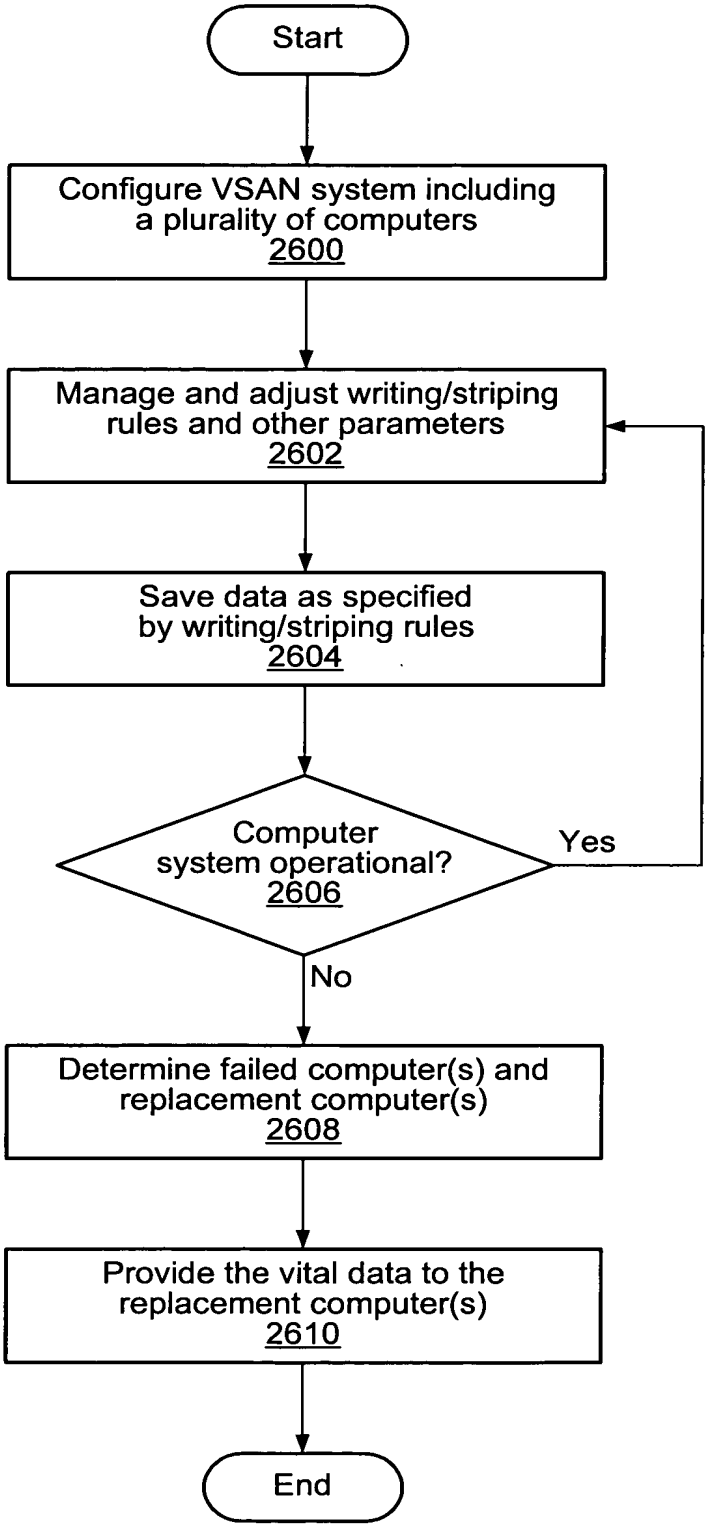
Start
Configure VSAN system including a plurality of computers 2600
Manage and adjust writing/striping rules and other parameters 2602
Save data as specified by writing/striping rules 2604
Computer system operational? 2606
Yes
No
Determine failed computer(s) and replacement computer(s) 2608
Provide the vital data to the replacement computer(s) 2610
End

Fig. 25

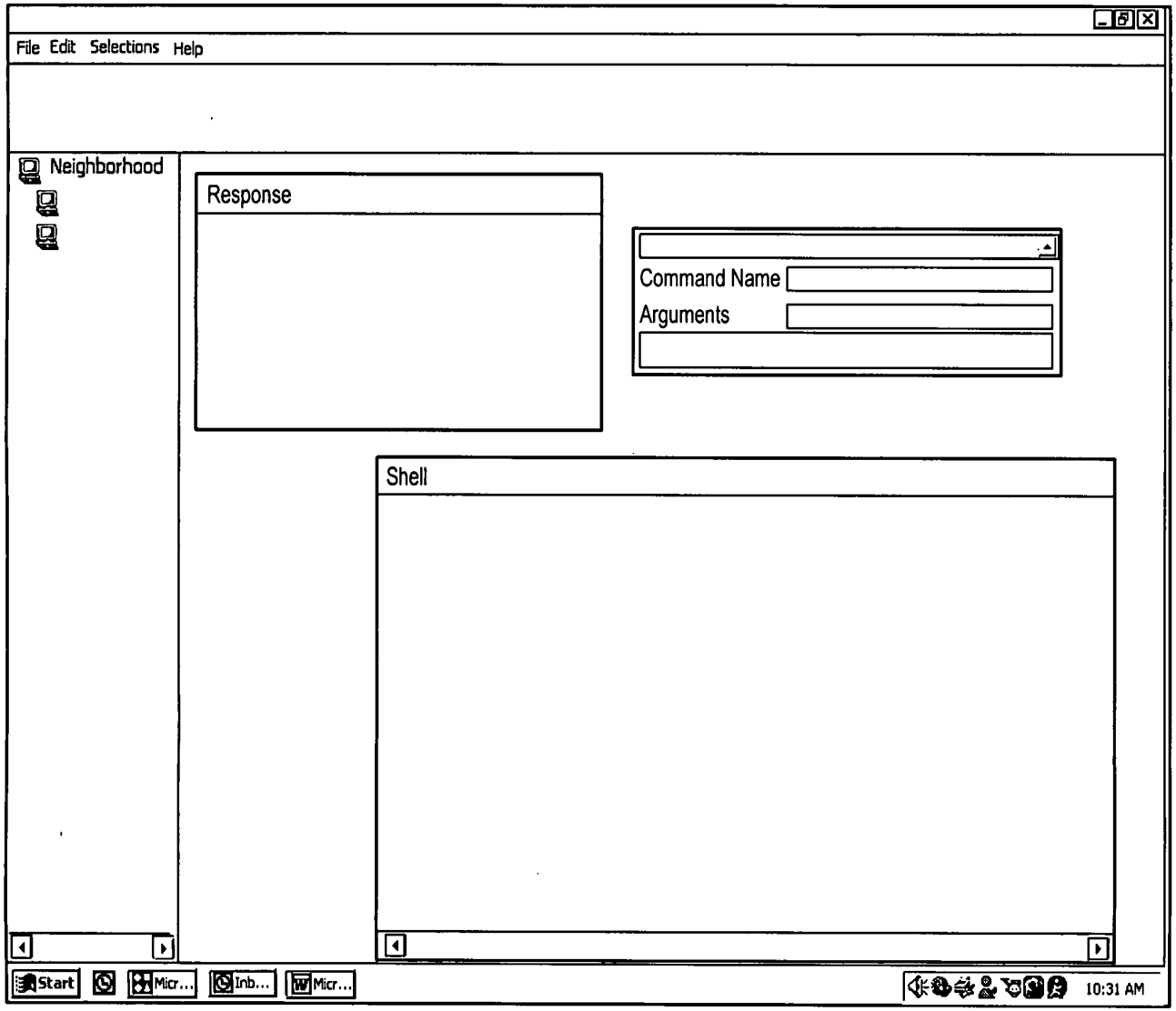
File Edit Selections Help
Neighborhood
Response
Command Name
Arguments
Shell
Start
Micr...
Inb...
Micr...
10:31 AM

Fig. 26

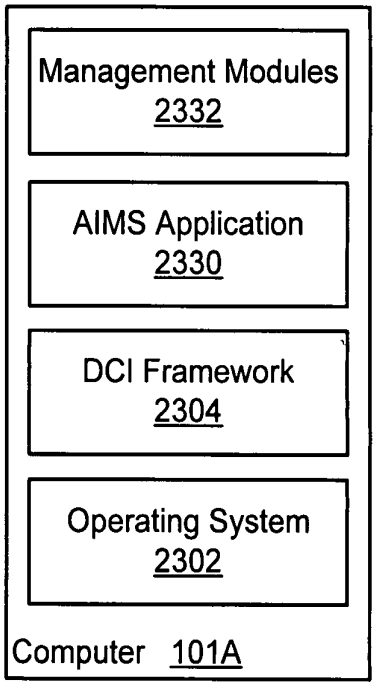
Management Modules
2332
AIMS Application
2330
DCI Framework
2304
Operating System
2302
Computer 101A

Fig. 27